



Live Fire Test Report for the SU-231A/PEQ



TP/JXNLM/C11/0541
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TEST REPORT FOR THE LIVE FIRE TESTING OF THE SU-231A/PQ

1. Introduction

This Test Report outlines results from the Live Fire Testing (LFT) of SU-231A/PEQ.

2. Purpose

The SU-231A/PEQ (EXPS) will be be fielded as a phased replacement for the SU-231/PEQ. Weapons Accessories Engineering (WPNAE) has tested the EOTech XPS weapon sight in conjunction with several live fire tests in the past year to verify the suitability of the EXPS in place of the SU-231/PEQ

3. System Descriptions

The XPS is a smaller, more rugged version of the SU-231/PEQ, offering the same functionality. The XPS utilizes a single CR123 battery transversely aligned to the barrel of the weapon vs. the SU-231/PEQ, which has two CR123 batteries co-axially aligned with the barrel. There are two differences between the XPS and the EXPS; otherwise the sights are considered to be the same. The XPS has the control buttons on the back of the sight like the original SU-231/PEQ, whereas the EXPS is configured with the controls on the side to provide easier function manipulation while the sight is used in conjunction with a magnifying optic. Also, the XPS has a screw mount while the EXPS is designed with a throw lever mount.

4. Host Weapons

The host weapon utilized for the XPS verification testing was the MK-17 SOF Combat Assault Rifle - Heavy.

5. Data and Findings

5.1. Data Requirements

In order to verify the suitability of the EXPS as a phased replacement for the SU-231/PEQ, the XPS was tested in conjunction with several other WPNAE live fire tests for accessory endurance as a secondary component to those tests. Initial testing began in March 2010, and all tests were complete by May 2010. This testing provided endurance information on five XPS sights out to 15,600 rounds each on the MK-17. Any performance issues with the XPS during testing were recorded on the test data sheets.

5.2 Live Fire Test Findings

The only endurance issue identified on the XPS while fired on the MK-17 was

(b)(3)

(b)(3)

Otherwise, the XPS performed without any problems.

6. Engineering Design Changes

The only design change necessary for the XPS and EXPS was (b)(3)
(b)(3) This was accomplished by (b)(3)
(b)(3) The effectiveness of this design change has been verified by testing the EXPS on the WPNAC shock simulator, which confirmed this is no longer an issue.

7. Conclusion

The XPS performed acceptably throughout live fire testing. As a result, the EXPS has been accepted as a suitable replacement for the SU-231/PEQ.